CLAIMS

What is claimed is:

1. An electrical compression connector comprising:

a first section having a first conductor receiving channel extending into a top side of the connector; and

a second section integrally formed with the first section, the second section having a second and a third conductor receiving channel extending into opposite respective second and third lateral sides of the connector,

wherein the second conductor receiving channel comprises opposing concave surfaces having different shapes.

2. An electrical compression connector as in claim 1 wherein the first section comprises a general U-shape.

3. An electrical compression connector as in claim 1 wherein the first and second sections are integrally formed as an extruded member.

4. An electrical compression connector as in claim 1 wherein the first, second and third conductor receiving channels extend generally parallel to each other.

5. An electrical compression connector as in claim 1 wherein a first one of the concave surfaces has a first radius of curvature and a second one of the concave surfaces has a second different radius of curvature.

6. An electrical compression connector as in claim 5 wherein the second radius of curvature is about 25% smaller than the first radius of curvature.

7. An electrical compression connector as in claim 1 wherein the second section comprises a curved cantilevered leg with a top surface forming a second one of the concave surfaces.

8. An electrical compression connector as in claim 7 wherein an aperture is provided between a tip of the cantilevered leg and an opposing surface at the second lateral side, and wherein an aperture is provided through the third lateral side into the third conductor receiving channel.

9. An electrical compression connector as in claim 1 wherein the second section further comprises a fourth conductor receiving channel extending into the third lateral side of the connector.

10. An electrical compression connector as in claim 9 wherein the second section comprises a curved cantilevered leg having a top surface which forms a portion of the fourth conductor receiving channel.

11. An electrical compression connector as in claim 1 wherein the third conductor receiving channel comprises opposing concave surfaces having a same shape.

12. An electrical compression connector as in claim 1 wherein the second conductor receiving channel comprises a side surface between the opposing concave surfaces having a substantially flat shape.

13. An electrical compression connector as in claim 1 wherein the third conductor receiving channel comprises opposing concave surfaces and a side surface between the opposing concave surfaces having a substantially flat shape.

14. An electrical compression connector as in claim 13 wherein the second section further comprises a fourth conductor receiving channel extending into the third lateral side of the connector, wherein the fourth conductor receiving channel is located below the third conductor receiving channel, and wherein the fourth conductor receiving channel comprises curved top, bottom and side surfaces having a same radius of curvature.

15. An electrical compression connector and electrical conductor assembly comprising:

an extruded electrical compression connector comprising a first generally U-shaped section forming a first conductor receiving channel, and a second section integrally formed with the first section, the second section comprising a second conductor receiving channel with opposing first and second curved conductor contact surfaces each having a different radius of curvature, the second section having a bottom cantilevered curved leg forming the second contact surface; and

a class K electrical conductor located in the second conductor receiving channel,

wherein, when the connector is compressed onto the conductor, the leg is deformed towards the first contact surface.

16. An electrical compression connector as in claim 15 wherein the second section comprises a third conductor receiving channel on an opposite side of the second conductor receiving channel, the third conductor receiving channel having a smaller size than the second conductor receiving channel.

17. An electrical compression connector as in claim 16 wherein the second section comprises a fourth conductor receiving channel on the opposite side of the second conductor receiving channel and located below the third conductor receiving channel, the fourth conductor receiving channel having a smaller size than the third conductor receiving channel.

18. An electrical compression connector as in claim 15 wherein a second one of the radii of curvature is about 25% smaller than a first one of the radii of curvature.

19. An electrical compression connector as in claim 18 wherein the second section comprises a curved cantilevered leg with a top surface forming a second one of the contact surfaces having the second radii of curvature.

20. An electrical compression connector as in claim 15 wherein the second conductor receiving channel comprises a side surface between the opposing conductor contact surfaces having a substantially flat shape.

21. An electrical compression connector as in claim 20 wherein the second section further comprises a third conductor receiving channel having opposing concave surfaces and a side surface between the opposing concave surfaces with a substantially flat shape.

22. A method of manufacturing an electrical compression connector comprising steps of:

extruding a metal member through an extrusion die;

forming the metal member during the step of extruding with a first section having a main conductor receiving channel;

forming the metal member during the step of the extruding with a second section having a first tap conductor receiving channel and a second tap conductor receiving channel,

wherein the first tap conductor receiving channel is formed with opposing concave surfaces each having a different radius of curvature.

23. A method as in claim 22 wherein the step of forming the second section further comprises forming a third conductor receiving channel below the second tap conductor receiving channel.